

14 Channel Personal FRS 2-Way Radio with Quiet Code

21-1864

OWNER'S MANUAL — Please read before using this equipment.

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! IMPORTANT !

If an icon appears at the end of a paragraph, go to the box on that page with the corresponding icon for pertinent information.

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|---|---|
|  — Warning |  — Important |
|  — Caution |  — Note |

CAUTION

Installing Batteries

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (alkaline or rechargeable), or rechargeable batteries of different capacities.
- If you do not plan to use the radio for a month or longer, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

Recharging Ni-Cd or Ni-MH Batteries

- You must use a Class 2 power source that supplies regulated 6V DC (Not more than 6V) and delivers at least 600mA. Its center tip must be set to positive and its plug must fit the radio's DC 6V jack. Using an adapter that does not meet these specifications could damage the radio or the adapter.
- Always connect the adapter to the radio before you connect it to an external power source (such as an AC outlet or a vehicle cigarette-lighter socket). When you finish, disconnect the adapter from the power source before you disconnect it from the radio.

WARNING

- Never install non-rechargeable batteries when **CHARGE ON/OFF** is set to **ON**. Non-rechargeable batteries can get hot or explode if you try to recharge them.
- Dispose of old batteries promptly and properly. Do not burn or bury them.

Family Radio Service (FRS) is a license-free, two-way, short-range voice radio service that lets families and groups keep in touch with each other on specific reserved channels while providing clear communication for up to two miles.

Your RadioShack 14 Channel Personal FRS 2-Way Radio is a lightweight, palm-sized radio you can use to talk with another person who has an FRS radio set to the same frequency as your radio.

Your radio has auto-squelch, so you will not hear anything on a channel unless someone is transmitting nearby on the same channel. You can use **MON** (monitor) to temporarily turn off auto-squelch to hear weaker, distant transmissions.

You can connect an optional speaker/microphone and earphone to the radio (neither supplied, available at your local RadioShack store and online at RadioShack.com).

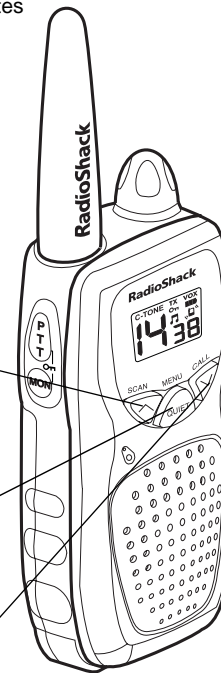
Vibration Alert – vibrates for 2 seconds when receiving a signal if the radio has been idle for more than 30 seconds.

Voice Operated Transmission (VOX) – enables standalone usage and works with a handsfree accessory.

Channel Scan – use to find other FRS users.

38 Quiet Code – eliminates interference from other radios that are not tuned to the same channel and quiet code as your radio.

Call Function – sends a page to other FRS radios set to the same channel.




PREPARATION

INSTALLING BATTERIES

Your radio requires four AAA alkaline or rechargeable nickel-cadmium (Ni-Cd) / nickel-metal hydride (Ni-MH) batteries (not supplied) for power. For the best performance and longest life, we recommend RadioShack batteries.

1. Rotate **VOL/OFF** counterclockwise until it clicks to turn off the radio.
2. Pull down the latch on the battery compartment cover, then remove the cover.
3. Slide **CHARGE ON/OFF** inside the battery compartment to **OFF** (for alkaline batteries) or **ON** (for Ni-Cd or Ni-MH rechargeable batteries).
4. Install four AAA batteries according to the polarity symbols (+ and -) marked inside.
5. Replace the cover and push the latch up until it clicks, then rotate **VOL/OFF** clockwise until it clicks to turn on the radio.

The battery icon segments on the display show how much power remains. When  flashes, replace the alkaline batteries or recharge the Ni-Cd or Ni-MH batteries.

RECHARGING NI-CD OR NI-MH BATTERIES

The radio's **DC 6V** jack is for charging Ni-Cd or Ni-MH batteries and powering the radio. You can recharge Ni-Cd or Ni-MH batteries inside the radio, using a 6V, 600mA AC or DC adapter and a size F Adaptaplug™ connector (neither supplied, both available at RadioShack).

1. Rotate **VOL/OFF** fully counterclockwise to turn off the radio.
2. Pull down the latch on the battery compartment cover and remove the cover.
3. Set **CHARGE ON/OFF** to **ON**.
4. Place four Ni-Cd or Ni-MH batteries in the compartment according to the polarity symbols (+ and -) marked inside. Then replace the cover and push the latch up until it clicks.
5. Attach the Adaptaplug to the adapter so TIP reads positive (+).
6. Connect the Adaptaplug's other end to the radio's **DC 6V** jack and plug the adapter into a standard AC outlet or a vehicle's power source.



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NOTE

Recharging Ni-Cd or Ni-MH Batteries

- Average charge time varies, depending on capacity. Typically, Ni-MH batteries charge in about 10 hours. Ni-Cd batteries charge in approximately four hours.
- You can use your radio while charging the batteries if you employ a DC to DC regulated and filtered adapter (such as RadioShack catalog number 273-1859), but not if you employ an AC to DC regulated adapter (such as 273-1762).

Controls

- If you hold down **PTT** over 2 minutes, the radio automatically stops transmitting to save power. The radio will generate an alert tone and **TX** will flash on the display if you continue to hold down **PTT**.
- The radio automatically scans through quiet codes while scanning through the channels. The quiet code feature automatically turns on when a signal is detected on a channel and quiet code, and turns off after the signal disappears. To stay on the active channel and quiet code, press **PTT** to stop scanning before the signal disappears.

Using Key Lock

When the keys are locked, you can still send a page to other FRS radios set to the same channel by holding down **V/CALL**, but you cannot select a channel by pressing **V/CALL**.

! IMPORTANT !

The EPA certified RBRC® Battery Recycling Seal on the nickel-cadmium (Ni-Cd) battery indicates RadioShack is voluntarily participating in an industry program to collect and recycle these batteries at the end of their useful life, when taken out of service in the United States or Canada. The RBRC program provides a convenient alternative to placing used Ni-Cd batteries into the trash or the municipal waste stream, which may be illegal in your area. Please call 1-800-THE-SHACK (1-800-843-7422) for information on Ni-Cd battery recycling and disposal bans/restrictions in your area. RadioShack's involvement in this program is part of the company's commitment to preserving our environment and conserving our natural resources.



Complete charging takes about 10 hours. When charging is complete, unplug the AC or DC adapter from the power source, then disconnect it from the radio's **DC 6V** jack.!

USING THE SWIVEL BELT CLIP

Insert the swivel belt clip into the socket at the back of the radio until it clicks. To remove the clip, press the button at the top of the belt clip and pull out the clip.

OPERATION

CONTROLS

PTT – Hold down and speak into the microphone to transmit. **TX** appears. Release to stop transmission.

MON – Hold down to hear everything on a channel, even weak transmissions. Release to turn auto-squelch back on.

VOL/OFF – Rotate to turn the radio on and off and adjust the volume.

^/SCAN – Press to manually select a channel. The selected channel number appears. Hold down for about two seconds to scan through the channels. The radio automatically scans through the channels and pauses on each active channel. To restart scanning when the radio pauses on an active channel, press **^/SCAN** again. To stop scanning, press **PTT**.

V/CALL – Press to manually select a channel. The selected channel number appears. Hold down to send a page to other FRS radios set to the same channel. **TX** appears and the call tone sounds. After you hold down **V/CALL** for about six seconds, the tone stops.

FRS FREQUENCIES

Channel #	Frequency (MHz)
1	462.5625
2	462.5875
3	462.6125
4	462.6375
5	462.6625
6	462.6875
7	462.7125
8	467.5625
9	467.5875
10	467.6125
11	467.6375
12	467.6625
13	467.6875
14	467.7125

USING KEY LOCK

To lock or unlock **^/SCAN**, **V/CALL** and **QUIET/MENU**, hold down **MON** then press **PTT**. **OL** appears when the keys are locked.

USING AN OPTIONAL WRIST STRAP

You can attach an optional wrist strap (not supplied) to the radio. Slide the wrist strap's small loop under the bar at the top of the radio. You might need to use a small screwdriver or a straightened paper clip to do this. Then pull the strap's large loop through the small loop.

QUIET CODES

Quiet Codes lets you talk and listen to other radios set to the same channel and quiet code. This is like having a sub-channel within a channel, giving you greater communication flexibility. When you set a quiet code and turn on this feature, you can communicate with anyone who has a radio set to the same channel and code.

1. Press **QUIET/MENU** until the quiet code number flashes.
2. Repeatedly press **^/SCAN** or **V/CALL** until you see the code number you want to use. (See the "Quiet Code Chart" for complete list of quiet codes).
3. Press **PTT** to store the code.
4. To turn off the quiet code feature, press **QUIET/MENU** once. The quiet code number disappears.

QUIET CODE CHART

Code	Frequency (Hz)
1	67.0
2	71.9
3	74.4
4	77.0
5	79.7
6	82.5
7	85.4
8	88.5
9	91.5
10	94.8
11	97.4
12	100.0
13	103.5
14	107.2
15	110.9
16	114.8
17	118.8
18	123.0
19	127.3
20	131.8
21	136.5
22	141.3
23	146.2
24	151.4
25	156.7

Code	Frequency (Hz)
26	162.2
27	167.9
28	173.8
29	179.9
30	186.2
31	192.8
32	203.5
33	210.7
34	218.1
35	225.7
36	233.6
37	241.8
38	250.3


USING COURTESY TONE

If the courtesy tone is on, **C-TONE** appears and the person you are communicating with hears the courtesy tone when you finish transmitting. Hold down **QUIET/MENU** until **C-TONE** flashes. **On** or **OFF** appears. Repeatedly press **▲/SCAN** or **▼/CALL** to switch between the on and off settings. Press **PTT** to store the setting, or the radio stores the displayed setting after 15 seconds.

SETTING THE KEY TONE

You can set the radio so it sounds a tone when you press any key except **PTT** or **MON**. Hold down **QUIET/MENU** until **C-TONE** flashes. Repeatedly press **QUIET/MENU** until **Ⓝ** flashes. **On** or **OFF** appears. Press **▲/SCAN** or **▼/CALL** to switch between the on and off settings. Press **PTT** to store the setting, or the radio stores the displayed setting after 15 seconds.

SETTING THE VIBRATION ALERT

You can set the radio to vibrate for two seconds when a signal is received after the radio has been idle for 30 seconds. 

Hold down **QUIET/MENU** until **C-TONE** flashes. Repeatedly press **QUIET/MENU** until **Ⓝ** flashes. **On** or **OFF** appears. Press **▲/SCAN** or **▼/CALL** to switch between the on and off

CARE

Keep the radio dry; if it gets wet, wipe it dry immediately. Use and store the radio only in normal temperature environments. Handle the radio carefully; do not drop it. Keep the

SERVICE AND REPAIR


If your radio is not performing as it should, take it to your local RadioShack store for assistance. Modifying or tampering with the radio's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it.

settings. Press **PTT** to store the setting, or the radio stores the displayed setting after 15 seconds.


USING VOICE OPERATED TRANSMISSION (VOX)

Your radio has built-in Voice Operated Transmission (VOX), which allows you to transmit without holding down **PTT**, by talking through the microphone or using VOX accessories (available at your local RadioShack store).

When you use a VOX accessory, turn off the radio, then insert the VOX headset into the radio's earbud/mic jack and turn on the radio. The VOX function activates automatically, and **VOX** flashes. The sensitivity level is automatically set to **HI** if VOX is off before inserting the VOX headset.

1. To adjust the sensitivity, hold down **QUIET/MENU** until **C-TONE** flashes, then repeatedly press **QUIET/MENU** until **VOX** flashes. 
2. Repeatedly press **▲/SCAN** or **▼/CALL** to set VOX to **HI** for high sensitivity, or **Lo** for low sensitivity, or **OFF** to turn off VOX.
3. Press **PTT** or **QUIET/MENU** to store the setting or it will store the displayed setting after 15 seconds of no activity. When VOX is activated, **VOX** flashes periodically.
4. Speak into the microphone to transmit. **TX** appears.
5. Press **PTT** to turn off VOX. **VOX** stops flashing. Press **PTT** again to turn on VOX. **VOX** flashes.

USING THE BACKLIGHT

Your radio's display has a backlight that turns on for approximately 10 seconds when you press any key (except **PTT** when VOX is disabled). To turn on the backlight without changing any settings, press **MON**. 

radio away from dust and dirt, and wipe it with a damp cloth occasionally to keep it looking new.



Setting The Vibration Alert

When you turn on the radio, it vibrates, even if the vibration alert is off.

Using Voice Operated Transmission (VOX)

- The VOX sensitivity levels (Hi or Lo) allow you to compensate for background noise. This minimizes the chance of unintended sounds making a transmission.
- VOX is disabled while you are receiving a transmission.

Using the Backlight

You cannot turn on the backlight while the radio is receiving a signal.

Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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! IMPORTANT !

Do not open your radio to make any internal adjustments. Your radio is set up to transmit a regulated signal on one of 14 assigned frequencies. It is illegal to alter or adjust the settings inside the radio to exceed those limitations. Any adjustments to your radio must be made by a qualified technician using the proper test equipment.

FCC INFORMATION

To be safe:

- Never open your radio's case.!
- Never change or replace anything in your radio except the batteries.

Your radio might cause TV or radio interference even when it is operating properly. To determine whether your radio is causing the interference, turn it off. If the interference goes away, your radio is causing it. Try to eliminate the interference by:

- Moving your radio away from the receiver.
- Calling your local RadioShack store for help.

If you cannot eliminate the interference, the FCC requires that you stop using the radio.

This device complies with Part15 of the *FCC Rules*. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the *FCC Rules*. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.

Consult the dealer or an experienced radio/TV technician for help.

SAFETY INFORMATION

Your wireless handheld portable transceiver contains a low power transmitter. When the Push-To-Talk (PTT) button is pressed, it sends out radio frequency signals. The device is authorized to operate at a duty

factor not to exceed fifty percent. In August 1996, the Federal Communications Commission adopted RF exposure guidelines with safety levels for handheld wireless devices.

CAUTION

- To maintain compliance with the FCC's RF exposure guidelines, hold the transmitter and antenna at least 2 inches (5 cm) from your face and speak in a normal voice, with the antenna pointed up and away from your face. If you wear the handset on your body while using the headset accessory, use only the supplied belt clip for this product and when transmitting, take it out of the belt to ensure the antenna is at least 1 inch (2.5cm) from your body.
- Use only the supplied antenna. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

SPECIFICATIONS

Frequency Range	462.5625 – 467.7125MHz
Channels	14
RF Output Power	400 – 500mW ERP
Power Supply	6.0 VDC (4 × AAA Alkaline)
Battery Life	20 hours (alkaline batteries)
Operation Temperature	–4 to 122 °F (–20 to 50 °C)
Dimension (HWD)	4 ¹ / ₂ × 2 ³ / ₈ × 1 ¹ / ₃ in (115 x 61 x 34mm)
Weight.....	5.1 oz (148g)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.